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527/01 NEW PEST....New soilborne virus disease in statice

In 1989 a new, obviously soil-borne virus disease was found in statice (*Goniolium tartaricum*) in southern Germany (Rhein Hessen). The disease was associated with typical virus symptoms such as mosaic, yellowing, necrosis and malformation of leaves as well as severe flower damages.

Studies on the host range, symptomatology, particle morphology, physical properties and the serology of the virus demonstrated its belonging to the tombusvirus group. It was found that systematically infected host plants released virus particles into the surrounding previously sterilized substrate and that uninfected plants took up the particles from substrate.

The authors suspect that the virus is transmitted without the help of a vector.

Source: Krczal, G.; Beutel, M. (1992) A new soilborne virus disease in statice (*Goniolium tartaricum*).
Lecture at the '8th International Symposium on Virus Diseases of Ornamental Plants' Praha, August 24-28, 1992



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527/02 NEW PEST....New potyvirus on *Alstroemeria* sp.

In the USA a new potyvirus has been characterized from *Alstroemeria* sp. which caused leaf streaking and necrosis and might induce considerable damage to alstroemeria cultivations. Transmission electron microscopy of crude leaf extracts revealed the presence of 780 nm long x 12 nm wide flexuous rods. ELISA tests showed that the purified virus reacted strongly with a potyvirus specific antiserum.

Based on cytopathological studies, particle morphology and serology the authors assigned the virus to the potyvirus group and distinguished it from the alstroemeria mosaic potyvirus since it could not be transmitted mechanically to other host plants.

The authors provisionally named this virus 'alstroemeria streak potyvirus'.

Source: Wong, S.M.; Reiser, R.H. (1992) Characterization of a new potyvirus from alstroemeria in the USA.
Lecture at the '8th International Symposium on Virus Diseases of Ornamental Plants' Praha, August 24-28, 1992



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527/03 **POSTXX...Isolation and identification of potato spindle tuber viroid in Egypt**

In Egypt, potato spindle tuber viroid (EPPO A2 organism) was isolated and identified. Potato plants produced from potato tubers with spindle shape and severe growth crack and tomato showing leaf curl and severe stunting were used for the isolation. On the basis of symptomatology and host range, mode of transmission, stability properties and separation by polyacrylamide gel electrophoresis (PAGE), the samples were considered to contain an isolate of potato spindle tuber viroid.

Source: Arab and Near East Newsletter 1991, No. 13 p. 31.

527/04 **POSTXX...New distribution list for potato spindle tuber viroid**

Due to the recent finding of potato spindle tuber viroid (EPPO A2 organism) in Egypt the distribution list has to be changed accordingly:

EPPO Distribution List: Potato spindle tuber viroid

EPPO region: Egypt, Poland, Turkey, USSR.

Asia: China, India, Japan, Turkey.

Africa: South Africa.

North America: Canada, but reported absent from seed potato crops in New Brunswick (Singh & Crowley, 1985a) and Prince Edward Island (Singh et al., 1988a), USA.

South America: The first edition of the EPPO data sheet on PSTVd cited the viroid as widespread in South America. There are unconfirmed records for Argentina and Brazil and the situation in other countries remains uncertain.

This distribution list replaces all previously published EPPO distribution lists for potato spindle tuber viroid.

Source: EPPO Secretariat, Paris (1992-08)



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527/05 **TMSWXX/FRANOC...Tomato spotted wilt virus on aubergine in Sicily**

Tomato spotted wilt virus (potential EPPO A2 organism) has been previously reported to occur in Italy (Reporting Services 510/09 and 524/16). Now a first report on the occurrence of this virus has been published for Sicily where the organism was found on aubergine (*Solanum melongena*). Virus and vector *Frankliniella occidentalis* (EPPO A2 pest) were found in greenhouses and the author estimates that the virus will spread to other vegetable crops on the island.

Source: Betti, L. (1992) Tomato spotted wilt virus on eggplant in Sicily (Italy).
Phytopathologia Mediterranea 31, 119-120.

527/06 **TMSWXX/FRANOC...Tomato spotted wilt virus found in Romania**

The EPPO Secretariat has been informed that tomato spotted wilt virus (potential EPPO A2 organism) has been found in Romania on tomatoes. Approximately 2 ha of tomatoes were up to 100% infected and had to be destroyed. *Frankliniella occidentalis* (EPPO A2 pest) was also found.

Source: Research Institute for Plant Protection, Bucharest (1992-08)

527/07 **TMSWXX/FRANOC...Tomato spotted wilt virus found in Czechoslovakia**

Frankliniella occidentalis (EPPO A2 pest) the vector of tomato spotted wilt virus (potential EPPO A2 quarantine organism) has been present in Czechoslovakia since 1989. However, the virus did not appear in recent years.

In 1992 several plants from three commercial growers showed typical symptoms of tomato spotted wilt virus infection. Samples were analyzed by ELISA and found to be infected by the lettuce strain of the virus. Infected plants were chrysanthemums, begonia, tomato, pepper, *Zantedeschia aethiopica* and the weed *Galinsoga parviflora*.

Source: Mertelik, J.; Mokra, V.; Zacha, V. (1992) Detection of tomato spotted wilt virus in Czechoslovakia.
Poster at the '8th International Symposium on Virus Diseases of Ornamental Plants' Praha, August 24-28, 1992



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527/08

CORBSE/LEPTDE...*Leptinotarsa decemlineata* vector of
Clavibacter michiganense pv. *sepedonicus*

In North Dakota, US, several insects were screened under field and laboratory conditions for their capability to transmit *Clavibacter michiganense* pv. *sepedonicus* (EPPO A2 organism). Besides *Myzus persicae*, *Leptinotarsa decemlineata* was found to vector the potato ring rot pathogen. Not only adults, but also larvae of the Colorado beetle could transmit the pathogen which happens most likely by mechanical means since the bacterium was identified on the mouthparts of the beetles and larvae.

Source: Christie, R.D.; Sumalde, A.C.; Schulz, J.T.; Gudmestad, N.C. (1991)
Insect transmission of the bacterial ring rot pathogen.
American Potato Journal 68, 363-372.



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527/09 ERWIAM....*Erwinia amylovora* not present in Zimbabwe

EPPO has been informed by the Ministry of Agriculture/Plant Protection Research Institute of Zimbabwe that *Erwinia amylovora* (EPPO A2 organism) is not present in Zimbabwe with a limited distribution. The corresponding notification of its presence to the EPPO Secretariat (see Reporting Service 525/07) had been based on an error by the Ministry of Agriculture/Plant Protection Research Institute of Zimbabwe.

Source: Ministry of Agriculture/Plant Protection Research Institute of Zimbabwe, (1992-08)

527/10 ERWIAM...Fireblight in Jordan

In 1990, symptoms of fireblight caused by *Erwinia amylovora* (EPPO A2 organism) were observed in quince (*Cydonia oblonga*) in southern Jordan. Further laboratory studies revealed the presence of *E. amylovora*. Also apple and pear were affected. Surveys on disease occurrence and a screening on susceptibility for fireblight of local and foreign pome fruit varieties will be carried out.

Source: Tehabsim, A.; Masannat, K.; Janse, J.D.: (1992) Fireblight (*Erwinia amylovora*) on pome fruits in Jordan. *Phytopathologia Mediterranea* 31, 117-118.

527/11 ERWIAM...EPPO Distribution List of *Erwinia amylovora*

Due to the new finding of *Erwinia amylovora* (EPPO A2 quarantine organism) in Jordan the distribution list for fireblight has to be changed accordingly:

EPPO Distribution List: *Erwinia amylovora*

EPPO region: Belgium, Bulgaria (Bobev, 1990, personal communication), Cyprus (EPPO Reporting Service 457), Czechoslovakia (Kudela, 1988), Denmark, Egypt (new outbreaks from 1983, following a much earlier outbreak in 1964 - EPPO Reporting Service 467), France (except south-east) (Larue & Vincent, 1990), Germany, Greece (Psallidas, 1990), Ireland (EPPO Reporting Service 472), Israel (EPPO Reporting Service 459, Shabi _et al., 1990), Italy (Puglia area only - EPPO Reporting Service 511), Lebanon (EPPO Reporting Service 498), Luxembourg, Netherlands, Norway (EPPO Reporting Service 471; Sletten, 1990), Poland, Sweden (EPPO Reporting Service 477), Switzerland (isolated incidents, not established - EPPO Reporting Service 506/07; Grim & Vogelsänger, 1989),



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Turkey (Oktem & Benlioglu, 1988), UK (including Northern Ireland - EPPO Reporting Service 484), USSR (Armenia only, according to EPPO Reporting Service 506/08, but there are also published records in Crimea), Yugoslavia (EPPO Reporting Service 509/14).

Africa: Egypt

Asia: China (unconfirmed), Israel (EPPO country), Jordan, Lebanon (potential EPPO country), Korea Republic (unconfirmed), Saudi Arabia (unconfirmed), Turkey (EPPO country), Vietnam (unconfirmed), India (Papdiwal & Deshpande, 1978; on rose and therefore dubious). The record in Japan cited in the first edition of the EPPO data sheet (OEPP/EPPO, 1983) is an error.

North America: Bermuda, Mexico, USA, Canada.

Central America and Caribbean: Guatemala (unconfirmed), Haiti.

South America: Colombia (unconfirmed). The record in Chile cited in the first edition of the EPPO data sheet (OEPP/EPPO, 1983) is an error.

Oceania: New Zealand.

This distribution list replaces all previously published EPPO distribution lists for E. amylovora.

Source: EPPO Secretariat, Paris (1992-08)



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527/12 ALECWO...Natural enemies of *Aleurocanthus woglumi* in
Costa Rica

A survey was carried out in Costa Rica to determine the natural enemies of *Aleurocanthus woglumi* (EPPO A1 pest) in several regions of the country.

The most important antagonistic agent collected was *Encarsia opulenta*, but *Delphastus* sp., *Chrysopa* spp. as well as the entomogenous fungi *Aschersonia aleyrodis* had also significant predatory effects.

Source: Elizondo, J.M.; Quezada, J.R. (1990) Identification and evaluation of the natural enemies of the citrus blackfly *Aleurocanthus woglumi* in four citrus-growing areas of Costa Rica.(in Spanish)
Turrialba 40, 190-197.



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527/13 LIRIHU....Control of *Liriomyza huidobrensis* in Germany

The occurrence of *Liriomyza huidobrensis* (EPPO A1 pest; potential EPPO A2 pest) in the free state of Bavaria (Germany) has been reported in Reporting Service 526/16.

Experiments were carried out in the area of occurrence to control the leafminer with *Dacnusa sibirica* in greenhouses. It was found that the parasite controlled *L. huidobrensis* efficiently, up to 100% infestation rate, if no parallel chemical treatments against other pests were used.

Source: Leuprecht, B. (1992) Biologische Bekämpfung von *Liriomyza huidobrensis* in Gemüsekulturen im Gewächshaus.
Gesunde Pflanzen 44, 222-229.



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527/14 **THRIPL...Biological control of *Thrips palmi***

In Japan experiments were carried out to estimate the suppressive effect of *Orius* sp. on *Thrips palmi* (EPPO A1 pest) on aubergine under field conditions.

It was investigated that the thrips density and the damage on aubergine fruits due to thrips was considerably lower when the predator was present.

Source: Nagai, K. (1990). Suppressive effect of *Orius* spp. on the population density of *Thrips palmi* in eggplant in an open field.
Japanese Journal of Applied Entomology and Zoology 34, 109-114.



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527/15 TOXOCI/CSTXXX...*Toxoptera citricida* and citrus tristeza closterovirus present in Costa Rica

A survey was carried out in Costa Rica to determine if citrus tristeza closterovirus (EPPO A2 organism) and *Toxoptera citricida* (EPPO A1 pest) its vector are present in the country. 272 samples from 14 citrus plantations were analysed and citrus tristeza closterovirus was found mainly from plantations in the Alajuela Province. *T. citricida* had been found on samples from the Limon Province.

Source: Lastra, R.; Leandro, G.; Meneses, R. (1990) Diagnosis of citrus tristeza virus and its vector in Costa Rica. (in Spanish)
Turrialba 40, 235-237.

527/16 TOXOCI...Distribution of *Toxoptera citricida*

Due to the new record of *Toxoptera citricida* (EPPO A1 pest) in Costa Rica the distribution is now as follows:

EPPO Distribution List: *Toxoptera citricida*

EPPO region: absent (supposed records from Cyprus, Italy, Malta and Spain refer to *T. aurantii*).

Asia: China, Japan, India, Indonesia, Democratic People's Republic of Korea, Republic of Korea, Malaysia, Philippines, Sri Lanka, Taiwan, Thailand.

Africa: Cameroon, Congo, Ghana, Kenya, Mauritius, Mozambique, Nigeria, Reunion, Senegal, Sierra Leone, South Africa, St. Helena, Sudan, Tanzania, Uganda, Zimbabwe.

North America: USA (Hawaii only).

Central America and Caribbean: Costa Rica, Trinidad & Tobago.

South America: Argentina, Brazil, Chile, French Guiana, Guyana, Peru, Suriname, Uruguay, Venezuela.

Oceania: Australia, New Zealand (North Island), Cook Islands, Fiji.

This distribution list replaces all previously published EPPO distribution lists for Toxoptera citricida.

Source: EPPO Secretariat, Paris (1992-08)



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527/17

APLOBE...Seed treatments of rice against *Aphelenchoides besseyi*

In India, experiments were carried out to determine a seed treatment for rice seed to eliminate *Aphelenchoides besseyi* (EPPO A2 organism) without affecting the the viability of the seed.

Two treatments induced a 100% mortality of the white-tip nematode:

1. seeds were soaked in a 0.2% solution of mancozeb and monocrotophos and subsequently subjected to a vacuum fumigation (methyl-bromide ca 32 gm^{-3}) for 2 h at 30° C
2. same soaking procedure as in 1. but the vacuum fumigation was substituted by an atmospheric fumigation (aluminium phosphide ca $9,3 \text{ gm}^{-3}$).

Source: Prasad, J.S.; Varaprasad, K.S. (1992) Elimination of white-tip nematode, *Aphelenchoides besseyi*, from rice seed. **Fundamental and Applied Nematology 15, 305-308.**



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527/18 **PUBLICATION...Directory of virus and virus-like diseases of grapevines**

The Mediterranean Fruit Crop Improvement Council (MFCIC) and the International Council for the Study of Virus and Virus Diseases of Grapevine (ICVG) have published a directory of the major virus and virus-like diseases of grapevines.

On 111 pages the major virus diseases are described. The publication is in English

Source: Bovey, R. and Martelli, G.P. (1992) Directory of Major Virus and Virus-Like Diseases of Grapevines.
MFCIC and ICVG, 111 pp.

527/19 **PUBLICATION...In vitro micrografting of fruit trees**

A supplement to 'Petria - Giornale di Patologia delle Piante' an Italian phytopathological journal has been issued which deals exclusively with the *in vitro* micrografting of fruit trees.

The publication is divided in four chapters which are the proceedings of lectures hold at a seminar on *in vitro* micrografting in Rome. Besides general descriptions of the technique which is used to receive virus free fruit material specified chapters on the usage for grapevine and citrus are included. The publication is in Italian with rather short abstracts in English.

Source: Il Micronnesto *in vitro*.
Petria, Vol 2 Supplement 1, 1-36.